Staff Summary Report

Tempe

Council Meeting Date: 08-14-08 **Agenda Item Number:** 33

SUBJECT: Request to award a one-year contract to TransCore ITS, LLC, for an information display system and system integration at the Transportation Management Center within the Tempe Transportation Center.

DOCUMENT NAME: 20080814fslg20 **PURCHASES (1004-01)**

SUPPORTING DOCS: Yes

COMMENTS: (RFP #08-112) Total cost for this contract shall not exceed $532,692 during the initial contract period.

PREPARED BY: Lisa Goodman, CPPB, Procurement Officer, 480-350-8533

REVIEWED BY: Michael Greene, CPM, Central Services Administrator, 480-350-8516
Glenn Kephart, Public Works Manager, 480-350-8205

LEGAL REVIEW AS TO CONTRACT FORM ONLY: N/A

FISCAL NOTE: Sufficient funds have been appropriated in 6002459-7518.

RECOMMENDATION: Award the contract.

ADDITIONAL INFO: Request for Proposal (RFP) #08-112 was issued to establish a contract for a contractor to relocate the existing traffic signal control system and supply and install a fully operational information display system in the new Transportation Management Center. Three proposals were received. An evaluation committee comprised of Public Works, ITD, and Procurement staff, along with a consultant from Lee Engineering reviewed the responses. TransCore ITS, LLC received the high score and is recommended for award by the committee.

Vendor's Proposal Offer

It is REQUIRED that Proposal Offeror COMPLETE, SIGN and SUBMIT the original of this form to the City Procurement Office with the proposal response offer. An unsigned "Vendor's Proposal Offer", late proposal response and/or a materially Incomplete response will be considered non-responsive and rejected.

Proposal offeror is to type or legibly write in ink all information required below.

Proposal Offeror's Company Name TransCore ITS, LLC

Company Mailing Address 15300 North 90th Street, Suite 100 Scottsdale, Arizona 85260

Company Street Address 15300 North 90th Street, Suite 100 Scottsdale, Arizona 85260

Proposal Offeror Contact John Grant Title Associate Vice President

Contact's Phone No. 480-551-4657 E-mail address john.grant@transcore.com

Proposal Offeror's Company Tax Information:

Arizona Transaction Privilege (Sales) Tax No. 07-460800-Q or

Arizona Use Tax No. _____

Federal I.D. No. 86-0646628

City & State Where Sales Tax is Paid Scottsdale, Arizona

THIS PROPOSAL IS OFFERED BY

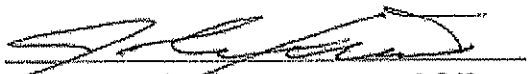
Authorized Proposal Offeror (Type or Print in Ink) John Grant

Proposal Offeror's Title (Type of Print in Ink) Associate Vice President

Date May 29, 2008

REQUIRED SIGNATURE OF AUTHORIZED PROPOSAL OFFEROR (Must Sign in Ink)

By signing this proposal Offer, Offeror acknowledges acceptance of all terms and conditions contained herein and that Prices offered were independently developed without consultation with any other offeror or potential offeror. Failure to Sign and return this form with proposal offer will result in a non-responsive proposal.



Signature of Authorized Proposal Offeror

May 29, 2008
Date

Form 201-B (RFP)
(H:\RFP 3-2002)

RFP 08-112

TRANSCORE

PROPOSAL QUESTIONNAIRE

OFFEROR EXPERIENCE AND CONTRACTOR SUPPORT

1. *How long has your company been in business marketing, integrating and servicing information display systems?*

   34 Years – TransCore (ITS Integrator)

   20+ Years – Activu (Information Display Systems)

2. *What is your company's core business?*

   TransCore provides design, installation, integration, maintenance, training, and operational support services for ITS software and hardware deployments.

   Activu, our team partner for this project, offers a wide range of specialized systems engineering and support services to design and implement large and small display systems.

3. *Please specify your firm's assigned Contract Manager to complete this project.*

   Name: Bo Gao, P.E., PTOE
   Phone: 480-551-4657
   Cellular Phone: 602-501-8970
   E-mail Address: bo.gao@transcore.com

4. *Please provide the location of your sales and technical support office and specify all services to be performed out of this office. List the staff (team) that will be responsible for supporting the City of Tempe project, based upon your capabilities at the time of proposal opening. Provide a brief overview of the experience and background for each team member.*

   Sales Office Address: 15300 North 90th Street, Suite 100, Scottsdale, Arizona 85260
   Phone Number: 480-551-4600
   Fax Number: 480-661-5490
   Website: TransCore.com

   Project Staff:

   Name: Bo Gao, P.E., PTOE – Contract Manager (TransCore)
   Phone: (480) 551-4657
   Experience: Bo is a Senior Transportation Engineer in our Scottsdale office with over 10 years of ITS experience, much of it involving Traffic Control Software (TCS) installation. Bo is the local representative for the City of Tempe's TCS (TransCore's TransSuite TCS system), possessing both an operational understanding of the system requirements through his traffic engineering experience as well as a technical understanding through his software development experience. In addition to managing this project, Bo will lead the relocation of the traffic signal control system task.

Name: Keith Patton (TransCore)
Phone: (770) 246-6212
Experience: Keith is an Associate Vice President with responsibility for leading our Traffic Control System (TCS) software design, and in particular, for the installation and integration of the current system that is in use with the City. TransCore is currently under contract with the City to help facilitate the relocation of this TranSuite TCS, and will therefore be available as part of this project to ensure all of the other components are transferred as a coordinated unit to minimize problems, disruptions and downtime.

Name: Tony Marciniak (TransCore)
Phone: (480) 551-4623
Experience: Tony is an engineer in our Scottsdale office with 20 years of experience, including extensive construction management experience. Tony is well versed and experienced with TransCore's QA/QC process, and he will be available as an onsite resource to ensure all subcontractor components are performed as expected.

Name: Brian Jakubczak (TransCore)
Phone: (480) 551-4630
Experience: Brian is a communications engineer in the Scottsdale office of TransCore with over 18 years of ITS experience. Brian was the communication designer, installer, and integrator of the Bell Road Traffic Signal Interconnect Project that was adopted as the prototype configuration for all future MCDOT projects. Brian also served as the principal designer for the Arizona Department of Transportation's (ADOT) Interim Traffic Operation Center (ITOC). The ITOC is responsible for traffic management of the I-10 corridor through Tucson, Arizona over the course of the three (3) year reconstruction of the freeway. In addition to design, Brian played a leading role in the construction oversight of the facility.

Name: Gary Bonner (TransCore)
Phone: (480) 551-4688
Experience: Gary is an ITS and communications technician in our Scottsdale office with seven (7) years of experience. Gary will assist in the physical construction of the TMC. Gary's ITS project experience includes work with ADOT, MCDOT, and the City of Phoenix.

Name: Henry Carabba (Activu)
Phone: (973) 366-5550
Experience: Henry Carabba has over 20 years experience supervising large systems engineering teams, the past 12 years specifically as a Project Manager for large-scale data/video wall installations. As Operations Manager, Henry will maintain overall project responsibility for the video wall and image processing system installation, and will participate in the system training.

Name: Jack Bullis (Activu)
Phone: (973) 366-5550
Experience: Jack Bullis has over 25 years experience in the audio-visual industry, and will be responsible for the system coordination, scheduling and management oversight of the Activu installation and support team and he will participate in the system training.

Name: Phil McGovern (Activu)
Phone: (973) 366-5550
Experience: Phil has 7 years experience with the installation of large, high profile wall systems including the New Jersey Transit, Hudson Valley DOT, US STRATCOM, and Amtrak centers. Phil's responsibility will be to provide onsite installation and maintenance support of the various display components and he will participate in the system training of the video wall.

5. *Please provide and explain any training, if available, for specific products being proposed. If training is not supplied directly by your company, please provide details regarding training organization and describe the relationship with the training organization. Training costs shall also be provided.*

The training requirements as defined in the RFP primarily focus on the Task 4 – Information Display System services. TransCore will submit to the City a training program for all materials and equipment provided as part of this contract. Training on specialty items such as the Activu image processing system and Mitsubishi video wall cubes will be provided by our Activu partner. Training on other items such as hardware and network integration will be provided by local TransCore personnel. Costs for training are included in the pricing.

6. *As specified in the Scope of Work, describe in detail all services proposed to the City of Tempe. All associated costs for these services shall be stated on the Price Sheet. (attachments may be used):*

As the designer and provider of the Tempe Traffic Control System software and hardware, TransCore has both the technical understanding and local resources needed to ensure all of the Tempe equipment is properly transferred and reinstalled in the new Tempe TMC facility. This complete understanding and awareness of everything that will be required, ensures the City that this move will be performed with minimal risk, and in the unlikely event an unforeseen issue does occur, we are the best prepared to address and resolve any hardware, software or communication issue that could possibly occur, since we and our team members, have complete familiarity with all of the major system components (traffic control system, video processing software, video wall and communications network).

Through this project, TransCore and our partner Activu will provide all labor, hardware, software, integration, testing and training that is required to meet the RFP requirements for the audio and information display systems to ultimately provide the City of Tempe with a state-of-the-art TMC. For essentially the same cost as a hardware video wall processor, we are proposing a software based system that offers greater functionality in terms of capability and expansion. The Activu video system is not only comparable in up front costs, but considerably cheaper if life-cycle costs, e.g. component replacement and upgrades, are factored in. The specifics of this scope of work are as follows:

Item 1: 16 port KVM Switch

TransCore will furnish and install a 16 port, rack mounted OMNI View KVM switch. This unit will support remote management and operation, and will be IP compatible for maximum functionality.

Item 2: Workstations

TransCore will furnish and install three Core 2 Quad Dell workstations. These workstations will be configured and installed in the consoles or locations as directed by City personnel, and they will each come with a standard 3 year warranty. If the workstation fails after the Dell warranty expires, TransCore will replace it with a new computer at any time up to the designated 5 year warranty period expires.

Item 3: System Integration

As noted above, system integration of ITS software and electronics is a core business practice of TransCore, not just a sideline activity. The result is that our understanding and experience of similar scopes of work will help to ensure the City that this migration of specialty software and electronic equipment to the new TMC will be performed seamlessly, efficiently and "uneventfully". As part of this task, TransCore will dismantle and relocate all of the necessary computer equipment to the new TMC. Given that we are also the provider of the traffic control system gives us the operational knowledge of how the entire system

functions, which in turn assures the City that the entire relocation will be coordinated as a single unit thereby minimizing the risk of finger pointing should a problem arise. Moreover, this affords us with a unique advantage in that we will also be in a position to configure all of the new system devices (i.e., video wall, processor, etc.) within the system to confirm full end-to-end operations from the operators' TransSuite workstation, prior to turning it back over to the City. Typical examples of this turnkey service will include the installation of TransSuite onto the new workstations to verify that all networking, communications, cameras, and traffic control software is functioning properly at each location. This allows us to validate that all system components (legacy as well as new), are properly configured prior to final acceptance and handoff back to the City. Moreover, because we have such a comprehensive level of understanding of what this project entails, our systems acceptance test will similarly be thorough and all encompassing.

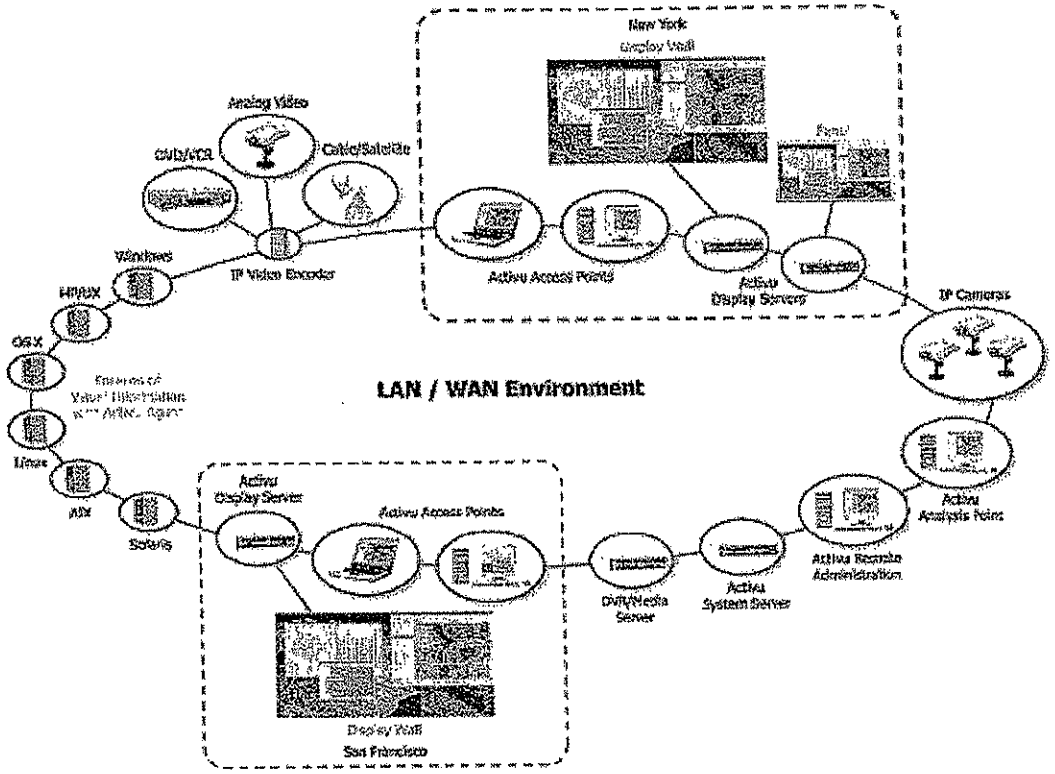
Item 4: Information Display System[1]

Our information display solution is to install the Activu suite of video control software and Mitsubishi video display cubes. Activu advances the visualization paradigm by creating a visual layer in the network that puts people at the center of the information ecosystem. Activu enables them to dynamically aggregate information from anywhere in the network, and visually integrate it on display walls, panels, desktop PCs or laptops. Consolidated visual information can be assimilated, analyzed and then shared person-to-person, team-to-team, display-to-display and site-to-site to create a truly dynamic collaborative environment. Decision making is dramatically improved, leading to more effective and efficient operations. Within role based security and access rights (centrally administered within the Activu system), each person defines their own information environment, with the flexibility to share as required.

Activu is a software suite running non-proprietary hardware that is integrated into an existing LAN/WAN network environment. In this way, Activu provides complete connectivity between people and information, along with complete flexibility to configure and dynamically change what information is displayed at any time on any display wall or individual device in any physical location.

As a network-based solution, Activu eliminates the need for extensive cabling or hardware elements, or extensive physical reconfiguration when requirements change. New elements – users, information sources, display devices and locations – are easily added with a network connection. Activu delivers remote monitoring via location-to-location synchronization/mirroring capabilities.

[1] The information in this section is Proprietary and Confidential and shall not be disclosed outside the City of Tempe, AZ organization and shall not be duplicated, used or disclosed in whole or in part for any purpose other than to evaluate the proposal. Provided that a contract is awarded to Activu Corp. as a result of or in connection with the submission of this proposal, TransCore ITS / City of Tempe, AZ shall have the right to duplicate, use or disclose the information to the extent provided by the contract. This restriction does not limit the right of TransCore ITS / City of Tempe, AZ to use information contained in the proposal if it is obtained from another source without restriction.



With its' open architecture, Activu integrates with virtually all 3rd party components (e.g. servers, analog and digital cameras, DVD/VCR, audio systems, satellite and broadcast feeds), also enabling device control (per City policy). Additionally, users/operators can access and display applications running on any industry-standard operating system (OS). Activu can also be interlinked with security systems. By adopting an IP approach, Activu ensures that new, emerging technologies are easily incorporated into Tempe's information and visualization environment, while still supporting current analog-based systems.

Sophistication in powerful simplicity

Since the product introduction in 1999, Activu has led the market in powerful functionality coupled with unsurpassed ease of use which together delivers a powerful tool to the desktop environment. Users now have the power of Activu at their fingertips on any laptop, desktop PC or panel display. A single click of a button provides the ability to manage any remote panel or large scale display wall anywhere in the network. Activu is so intuitive that operators require very little training to become fully functional.

1.1. Proposed Solution

The Activu Visualization System will be comprised of one (1) display wall made up of a tiled array of eight (8) SXGA+ (1400x1050) resolution 67" (measured diagonally), DLP rear projection display cubes, in a two (2) high x four (4) wide configuration. The cube array will be installed in the TMC on a base structure (height will be built to suit) that includes fabric acoustic panels for the front of the structure.

One (1) HD (resolution 1920 x 1080) 46" LCD flat panel display with attached speakers will be provided and installed by the Contractor in the Conference Room. The panel will be driven by the Activu system.

The Activu visualization system will include appropriate image Display Servers (with video expansion chassis), and a System Server. It will be driven by the Activu suite of software that enables visual information to be accessed, controlled (used) and displayed on the cube array and all other network-connected display devices as noted above. Complete information about the Activu suite is contained in the Activu System Software Components section.

Visual information is accessed from applications running on workstations available on the client network, or from applications running directly on the Display Servers. Most networked data sources, properly configured with an Activu Agent, can be displayed on the display wall. Software licenses for ten (10) Activu Agents are included with this proposal, so that up to ten (10) network connected computer sources can be displayed simultaneously. Most Windows, Linux, Solaris, HP/UX and OS-X sources can be both displayed and controlled in this manner (some other OS and any OpenGL, DirectX, DirectDraw or other applications making direct graphic accelerator hardware calls cannot be displayed via this method, but could connect to the system and be displayed instead, via the included RGB Capture inputs to the system).

External NTSC, PAL or SECAM video sources, such as cable or satellite television, live camera, DVD, and other playback or source devices, can be displayed on any device in video overlay windows which can be positioned and sized across each of the Display Servers. This is achieved using one or more optional video capture PCI cards installed in the Display Server(s). In this case, the display wall supplied will have the ability to connect and display up to sixteen (16) analog video sources. (Note: For best results when viewing video sources in a "Touring" manner, the analog video sources must be supplied from a switch that uses vertical interval switching)

Streaming video (e.g. MPEG-2, MPEG-4 and M-JPEG), displayed within scalable windows on the 2x4 TMC projection cube wall, are decoded within dedicated decoding servers that deliver decoded video images to the Display Server, where they are displayed individually. The powerful and flexible nature of this system allows for simultaneous display of streams of various resolutions. For example, the proposed system can display up to sixteen (16) 4CIF resolution streams, up to sixty four (64) 1CIF streams, and other combinations accordingly. On the 46" LCD panel in the Conference Room, where video streams are displayed, these are decoded within the Display Server workstation itself, with no external decoder required. In this case approximately eight (8) streams can be displayed across the single 46" LCD panels. If a larger number of streams must be displayed simultaneously, additional options can be provided at an increased cost – please contact Activu Corporation for more details. In the case of IP Video streams (such as camera sources), the streaming content is provided by a third party (i.e. the manufacturer of the encoders, DVR, cameras or camera management system), and the specific properties of that system will have a direct impact on the quantity and quality of streams displayed. (Notes: 1. If streaming video content is not compatible with Microsoft Windows Media Player, the Customer must provide the appropriate decoding software and software development kit (SDK), additional Activu integration charges would apply. QuickTime and RealVideo can be displayed by opening the appropriate viewer on the Activu desktop. If proprietary streaming video sources are required for display (not compatible with Microsoft Windows Media Player), please contact Activu for further information. 2. The quantity of streams listed is estimated, based on controlled testing that may or may not reflect each Customer's conditions. Many conditions, including the number of applications running on the display server, the window size, image resolution and encoding format of video streams can affect the actual number and performance of streams displayed)

Control and operation of the visualization system is accomplished by incorporating a dedicated control computer server and supporting peripheral equipment, configured together as the Activu System Server. Users interact with the System Server via an Activu provided Master User Station, consisting of an LCD panel, along with a keyboard and mouse, located at a predetermined position in the TMC. The System Server computer will be located in the equipment racks, along with the Display Servers and all other system equipment. Activu Corporation has created a Graphical User Interface ("GUI") from which the System

Operator ("Sysop") and any authorized user shall be allowed to control assignment of a selected input source(s) and associated sizing and location for viewing on the data/video display arrays. The system has the capability of storing and recalling individual presets, as well as responding to certain external alerts, the scripting of routines and sequences, and creating scheduled events with the Activu application. One (1) Master User Station position will be supplied for the System.

In operating environments where multiple users will control and use the Display System, Activu provides the customer with the ability to customize the way in which individual users or user groups use the system, per their operator login. Any number of users can be granted full or partial control over one or more display components, such as the display wall, or specific sources. GUI design and functionality can be similarly customized and centrally updated at any time. Pricing for one (1) Activu Access Point license is provided in this proposal. These licenses are for concurrent use; therefore, operators on different shifts can have individual logins and user profiles, yet share the same license. The specification indicates multiple positions of control, though not simultaneous control. If desired, additional licenses can be purchased to support multiple simultaneous control sessions, allowing for greater flexibility

The modular, network-based infrastructure of the Activu system allows for future system growth with minimal costs. New computer sources can be added simply by purchasing and installing an additional Activu Agent source license for the source computer, and connecting the new source to the existing network. Also, Activu's use of standard COTS (commercial off the shelf) servers invites the possibility of future upgrades as new technology is introduced to the marketplace.

The Audio Playback System proposed provides amplification and distribution to a pair of wall mounted speakers in the TMC. All volume control and source selection is controlled via Activu.

Activu Corp will provide its' standard documentation package, and will assist with training for the Purchaser's specified users and the Sysop. Activu has included a typically appropriate number of training hours in the price proposal. The specifics of the training program (schedule, number of students, etc.) can be discussed and modified to suit the needs of the customer prior to the preparation of the final proposal.

1.2. System Hardware & Equipment Components Description

Except as noted, all hardware, equipment and materials shall be provided by Activu and shall be integrated into the System as required in such manner as follows:

1.2.1. Display components

A display wall configured as 2 high by 4 wide array. Each cube will be a Mitsubishi MegaView VS-67PH50U, rear access with lamp changer, SXGA+ (1400 x 1050 resolution) Data Display utilizing DLP technology. These modular, self-contained cubes contain the optics, electronic signal modules and DLP engine in a stackable structure that interlocks to form a rigid display. The integral electronics module shall incorporate computer graphic inputs and provide loop-thru RS-232 ports, and unit/group ID assignment capabilities.

Each individual DLP Cube shall have a viewable 67" diagonal screen, whose dimensions are 40" high by 53.6" wide, with a maximum depth of 30". The separation between each screen is approximately 1 mm. The unit is field serviceable from the rear of the cube, via a removable access panel. The brightness is 500cd/m2 (146 ft-L) measured at screen center, with an 1800:1 contrast ratio. The array of DLP Cubes shall be installed on a raised platform, provided and installed by Activu.

The cube wall and bases are designed to create a self-supporting structure without the need for extra support. Additional structural supports are provided only when appropriate or specifically required. As part

of this proposal, simple, generic structural supports are provided capable of securing the cube wall to an available building structure, such as an adjacent wall or ceiling. However, if local building codes or owner policies dictate specific requirements for seismic (or other) support, and/or third party engineering approval, additional costs that are not included in this proposal may be incurred to meet these requirements. These costs would require a change order.

1.2.2. Activu Servers & Supporting Equipment

The System Server will be provided by Activu and shall be located in the main equipment rack. The high end, off-the-shelf server shall be configured according to Activu specifications, as follows:

- HP model DL-380*
- Dual Xeon processors
- Redundant power supplies
- RAID 1 drives

This computer will also have a multi-port serial adaptor card installed that will allow for RS-232 communication with peripheral controllable devices, as well as allow for control of the system from external sources. This computer will be viewable thru a KVM switch. Supporting peripheral equipment consisting of a rack-mounted keyboard, a pointing device (mouse or track ball) and a 17-inch rack-mounted monitor complete this workstation configuration as the Master User Station. The Activu System Suite, which is loaded on the System Server, will integrate into the User's network and will communicate with the Display Servers via the Gigabit Ethernet Connection.

Graphical display on the 2x4 array is accomplished by the Display Server, which will be provided by Activu. This high end, off-the-shelf server shall be configured according to Activu specifications, as follows:

- HP DL-585 server*
- Dual-Dual Core Opteron processors
- Redundant power supplies
- RAID 1 drives
- DataPath Express-16 PCI-X video expansion chassis

The HP server is connected via high speed bus to a video expansion chassis. Quad-channel graphic output cards will be installed in the video expansion chassis, forming the output display array. The Display Server will be configured with the appropriate number of output cards to complete the array, as specified. Each output channel is capable of resolutions up to 1920x1080 and shall be optimized to the display parameters of the DLP Cubes. The Display Server outputs shall provide signals, via hi-resolution, multi-conductor coaxial cable to a dedicated input in each DLP Cube. The Activu Display Server application loaded onto the Display Server will integrate into the User's network and will communicate with the System Server via the Gigabit Ethernet Connection.

Graphical display on the Contractor provided 46" High Resolution LCD Flat Panels is accomplished by the Display Server workstations which will be provided by Activu. These high end, off-the-shelf Workstations shall be configured according to Activu specifications, as follows:

- HP XW-8400* workstation
- Dual Dual-Core Xeon processor

A Quad-channel graphic output card will be installed in the Display Server workstation, with each output channel capable of resolutions up to 1920x1080 and shall be optimized to the display parameters of the LCD Flat Panel Display. The Display Server outputs shall provide signals, via hi-resolution, multi-conductor coaxial cable to a dedicated input in the LCD Display. The Activu Display Server application loaded onto the Display Server will integrate into the User's network and will communicate with the System Server via the Gigabit Ethernet Connection.

Both the System Server and the Display Server computers will be viewable at the master control station via a KVM switch. This enables easy access to both computers from a convenient (user defined) location in the control room.

Two (2) dedicated Decoder Servers are provided to decode streaming video and transport images to the Display Server, which will be provided by Activu. These high end, off-the-shelf servers shall be configured according to Activu specifications, as follows:

- HP model DL-140*
- Dual Quad-Core Xeon processors
- Redundant power supplies

One dual-output NVIDIA FX 3500 graphic output card will be installed in the Decoder Server, forming the output display array which provides graphic display of the video streams to the Display Server.

* Please note that due to rapid product evolution in the major brand server market, models and specifications are subject to change, based on availability at the time of purchase.

A. An AutoPatch modular Audio/Video matrix switching system is supplied with sixteen (16) composite video inputs and thirty-two (32) composite Video outputs to distribute audio and video signal to both the TMC data wall and the LCD panel. Control is integrated with the Activu system and the switch will distribute the required signals.

B. Analog Video source feeds, those in the system and those provided by the Client or others, will be directed to the Display Servers for integration onto the cube array and other display devices. The main display wall in the TMC and the LCD panel in the conference room each can display up to sixteen (16) standard NTSC video overlay windows. The video overlay windows create no overhead on the Display Servers PCI buss or CPU, allowing full processing power for the graphical display.

C. A 17" LCD (touch panel) display with keyboard and mouse on a KVM Extender will be provided for the operation of the system at the Master User Station location.

D. A rack mounted 17" LCD display with integrated keyboard and mouse on a KVM Extender will be provided for the operation of the system at the equipment rack location.

E. All additional system equipment, except for display components and OFE workstations, shall be mounted in standard 19" electronic equipment racks. Other configurations are possible, but must be specified in writing prior to final quote calculation

1.2.3. Audio components

A. An AutoPatch modular audio matrix switching system is supplied with sixteen (16) audio inputs and eight (8) outputs, to distribute audio signal to the supplied audio system and the Contractor supplied LCD display. Control is integrated with the Activu system and the switch will distribute the required signals.

B. The Audio playback system proposed includes one (1) Ashly SRA-2150 80 watt amplifier (per channel - 8 ohm) which provides audio for local playback via the supplied speakers.

C. One (1) Ashly VCM88 volume controller enables the operator to control the volume level for up to eight (8) separate zones remotely from the Activu control station.

D. Two (2) Tannoy Di6 DC 6.5" self-contained wall mount speakers are provided. The speakers include all hardware for installation including yoke mount.

1.3. Activu System Software Components

Activu is comprised of several software components performing specific task and roles, interacting to provide the User a wide range of control and interactivity with the System. The devices and associated components are:

A. Activu System Suite running on the System Server comprises the following software:

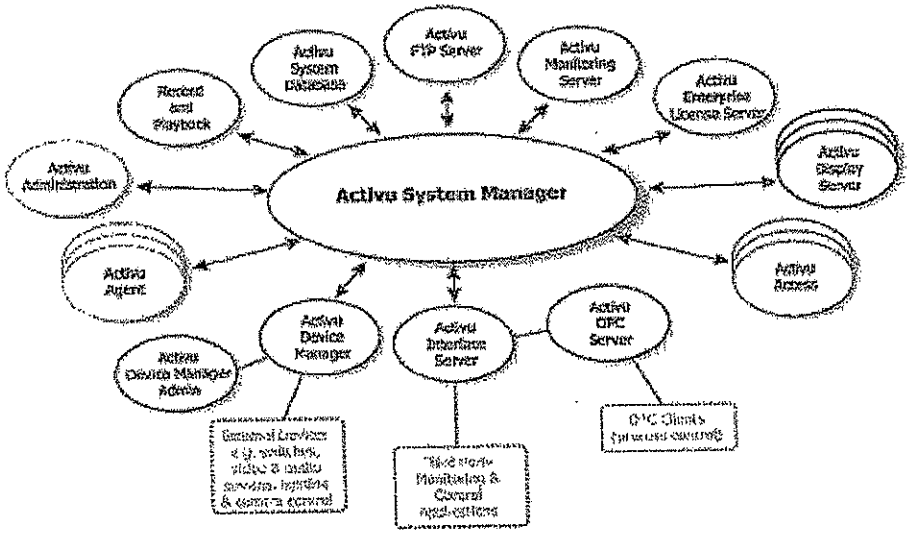
- Activu System Manager (ASM) which includes a central data base
- Activu FTP Server (AFTP) - a central file data base
- Activu Device Manager (ADM)
- Activu Interface Server (AIS) for communicating with other applications
- Activu Gateway (AG)

B. Activu Display Server is the Windows server connected directly to the display array. Each server is a node on the network, identified by IP address. The server has the capability to manually and remotely launch resident applications and use data files from the network.

C. An Activu Agent is loaded on each network connected sources (Windows or UNIX), allowing the sources to be both displayed and controlled within the Activu system.

D. Activu Access Points that present the user's GUI (Graphic User Interface). Any number can be used simultaneously and synchronously.

E. External Device Control – An integrated range of device control is possible including: Video teleconferencing (VTC), e.g. Polycom; Pan-tilt-zoom (PTZ), e.g. Sony cameras; audio; video; and lighting. This feature allows for the required control of the Intercom and VTC systems. The External Device Control feature requires the controlled device to be equipped with a serial or network port, and have an available API.



1.4. Standard Activu Features

Connectivity & Scalability

- Runs in single and multiple segregated LAN/WAN network environments
- Simple task to link in networks, locations, network sources, users, display walls and devices.

Compatibility & Control

- Access and display content running on most operating systems: Windows, Linux, HP/UX, AIX, Solaris, Mac OS X
- Microsoft .Net Application (compatible with .Net 2.0 and .Net 3.0)
- Launch and control a broad range of devices including: VTC & PTZ cameras, broadcast, DVD/ VCR, audio systems, lighting and other building systems
- Analog Video SD and HD (with optional input card)
- Analog RGB up to UXGA and 1080p (with optional input card)
- Supports most IP video encoder formats
- Integration with most IP video encoder formats and 3rd party applications: Activu SDK, Activu OPC-DA server, Socket and Serial communications
- IPv6 compatible

Security

- Network isolation capability
- 128 bit encryption and non-decryptable passwords
- Windows authentication
- Role-based security policies centrally defined and administered
- Content mirrored in other locations for remote monitoring purposes*
- Display wall zone control

Administration

- Fully encrypted remote system administration
- Role-based access rights policies and interfaces centrally administered
- User defined and programmable preferences for layouts, content windows, adjustment to immediate physical environment (e.g. mechanical desk, lighting)
- Powerful conditional scripting for task automation
- Job Scheduler to program pre-defined tasks that run periodically or on demand
- Activu License Server enabling enterprises to share network source licenses across multiple Activu systems

Monitoring

- Display wall monitoring with SMS and e Mail alerts
- Remote monitoring and control via authorized network connected PC

Graphical User Interface

- Quick launch vector scalable toolbar from desktop icon
- Customizable toolbar by individual user
- Direct access to all prime functionalities from toolbar buttons
- User-definable Layouts of compiled information windows can be saved and instantly recalled
- Search for resources with auto suggest
- Onscreen scalable keyboard
- Touch screen compatible
- Highly intuitive eliminates need for extensive training

Display

- Unlimited number of information windows
- Simple "Remote Control" drag and drop functionality for managing display wall content
- Quick launch to drag applications from the desktop onto other displays (such as display walls and mounted panels) where they can be opened and used
- Dynamically scale and place information on the display device
- Cut 'n crop viewable information
- Save layouts of aggregated and compiled information
- Save layouts for multiple displays (ie. individual walls, panels or desktop monitors)
- Snapshot: pixel perfect screenshot of any display content (excluding analog video)
- Widgets: calendars, clocks, countdowns, RSS feeds

Collaboration Tools

- Site-to-site synchronous display
- Edit screen views of aggregated information and send to other locations and displays
- Dynamic whiteboarding across multiple locations with multiple participant color legends, mark up & erase, screen save & print
- Instant messaging

1.5. Optional Features:

- Record/Playback – (Not included in this proposal) enables the recording and playback of individual computer sources, regardless of operating system, or the entire display wall for off-line analysis. Playback provides a perfect representation of the original information at full resolution, with pause and fast-forward, running date and time stamp. Playback is also capable of displaying the recorded information on display walls or other devices of differing dimensions and resolution, or on a single screen.

- This feature is suited for recording visual information from data sources running on any operating system. As network-based software, it does not record analog video which is not transmitted over an IP network. This feature does not record analog or streaming video sources, such as Cable / Satellite TV, VCR, DVD and VTC

- Activu Analysis Point – (Not included in this proposal) enables the offline playback of content (recorded by Activu Record / Playback) on an authorized, network connected workstation. Without this feature, playback can only be presented and viewed on the display wall only.

1.6. License Grant

The Purchaser shall have a perpetual, royalty-free site license to use all software delivered to Purchaser under this Agreement. The license to use includes the right to use Activu's software for the purpose of testing, back-up, disaster recovery, or archive. Purchaser shall include all Activu proprietary notices or legends on any copies of Activu's software made by Purchaser.

Exceptions to the RFP functional requirements for this item are as follows:

Activu COMPLIANCE exceptions and comments For Item 4 Information Display System - Pages 27 to 44; 18 & 20				
Spec. Page #	**Requirement**	**Exception**	**Alternative Proposal**	**Other Information**
Page 33: Environmental Requirements	Temperature and Humidity	Mitsubishi Offering Non-compliant	Mitsubishi spec is: Operating Temp 50° to 95° F , Humidity 20% to 80% non-condensing	
Page 35: Video Wall	Screen	Mitsubishi Offering Non-compliant	Mitsubishi screen is a two-element screen	Industry standard screens are two-element. We are not aware of any benefit to a 3-element screen
Page 34: Inputs	RGB	n/a		Clarification. The Activu system will transport these sources via the Customer network and the Activu software, not via RGB signal & switching hardware
Page 18: Special Terms & Conditions	Item 44, Software License	n/a	The Activu Software license will need to be executed by the End User. This is a separate document.	
Page 20: Scope of Work	Licensing	Activu does not hold an AZ Contractor's Lic.		TransCore, as the Prime, is a licensed contractor in AZ.

Item 5: Control Room Console

TransCore has extensive experience working with clients to help define their console requirements, and it is our intent to use this experience to assist the City in the final selection and design of the TMC console. Our solution to this task has been to identify and obtain from multiple vendors, quotes and sample designs that we believe will meet the aesthetic and functional needs of the TMC. However, we truly understand the City's dilemma and concern in how best to capture these "soft" requirements in an RFP, when there are so many variables to consider. Therefore, our approach for this task is to identify a console that we believe meets the "spirit" of the RFP, while reserving the option to accommodate change. Upon notice to proceed, we will meet with City personnel to review and discuss options/features that are used in other TMC's to help the City identify and prioritize key features the new console will need to possess. We will then work with the vendor we are proposing to see if we can fine tune this generic design into a product that is appropriate for Tempe. Based upon past experiences, we are confident that we have identified a console (and budget) that will adequately accommodate the needs of this TMC, but if we are off the mark and a higher / lower scaled version is required, we will be happy to work with the City to redesign or select a different vendor, and/or to negotiate a revised cost (up or down) as may be appropriate.

With the assistance of our selected and agreed upon vendor, TransCore will furnish and install the console furniture. The basic premise of this console is that it be designed for a control room environment, and matches the décor of the other elements within the TMC. TransCore will oversee all aspects of the

relocation and construction work, and our quality assurance personnel will be onsite during construction to ensure that the assembly is performed in accordance with expectations. TransCore personnel will also be on hand to field all questions and to work through any construction issue that may arise.

TransCore understands and appreciates the City of Tempe's commitment to minimizing the impact that the new TMC will have on the environment, and we are similarly committed to providing a TMC that both meets these operational requirements, and is environmentally friendly.

Item 6: Equipment Rack - Enclosed

TransCore will furnish and install six secure and high quality equipment racks in conformance with the specifications of the RFP. The IP addressable 16 position power strip is in our bid cost, though its removal from the item would significantly reduce the cost.

7. *Please provide the location of your maintenance facility and list all trained and certified technicians available to the City and specify all applicable certifications for each technician.*

TransCore will provide all front line support activities for the City. Located a short distance away in Scottsdale, our engineering and technical support staff will be able to quickly respond to any system or technical problems. These staff will then assume full responsibility for troubleshooting and repairing the item. If the item requires specialty handling, TransCore will handle all coordination with Activu or our other vendors to resolve the issue with as minimal imposition on the City staff as possible including the return and receipt of replacement parts. TransCore is a licensed Contractor in the State of Arizona.

Activu is based in Denville, New Jersey, half an hour west of Newark, so they can dispatch Activu personnel to be on site the next business day should the need arise. Activu also has 24/7 phone support, and with appropriate permissions from the City IT staff, they can telnet in to do remote diagnostics. As a provider and specialist in video walls and control systems, they have extensive experience in supporting all aspects of the video control system being proposed (i.e., wall, processors, etc.). For emergency situations that demand same day service, and neither TransCore nor Activu are able to resolve the problem through remote access, Activu also has a local and authorized media partner that can be called upon if conditions warrant.

Activu's support staff have a variety of certifications including:

- Our software department and primary software project managers are Microsoft Certified Systems Engineers (MCSE). Our support desk staff (Sandip Rana, Peter Basinski) are Microsoft Certified Professionals (MSP), are CompTIA (Computing Technology Industry Association) Certified in servers, as well as HP Platform Specialists.
- Our installation specialists for the cubes (Phil McGovern, Jim Hart, Fabian Santiago, Jon DiGiovanni, and Henry Carabba) are Mitsubishi Certified Systems Engineers. A letter from Mitsubishi attesting to certification is attached in the Appendix.

8. *What is your company's experience with projects of similar scopes of work? Include any experience in "Green Building" compliance or construction. Include the total number of information display system installed by your company in the last three years.*

TransCore has been involved in the planning, design, construction and/or operation of over 20 traffic management centers ranging in size from 400 square feet to over 35,000 square feet, five (5) having been in

the past three (3) years. TransCore is also the designer and integrator of the existing TransSuite Traffic Control Software (TCS) currently in use by Tempe.

Activu has installed approximately 80 video display systems over the past 3 years, and is a certified integrator of Mitsubishi cubes which are RoHS compliant.

REFERENCES

Please list three (3) customers for whom your firm has provided services of a similar scope as identified in this RFP, during the last 24 months. Include the length of any contracts listed.

TransCore			
Project Name & Location	**Solution Provided**	**Project Owner's Contact Information**	**Length of Contract**
1) City of Provo Traffic Control Center (Provo, Utah)	Design, construction management and system integration of new traffic control room including all system electronics (i.e., video/audio system), furnishings (console, conference table, chairs, etc.) and adjacent signal lab	Dave Graves Assistant City Engineer 801-852-6745	1 year
2) FAST System Integrator Stage I (Las Vegas, NV)	Services consisted of program management, value engineering, installation, software testing, preparation and integration of the control room a 36-cube video wall, TMC consoles, video compression equipment, and network equipment.	Tom Moore State Engr. Nevada DOT 775-888-7566	1 year related scope, as this was part of larger multi-year contract
3) Utah DOT Traffic Operations Center (Salt Lake City, Utah)	Developed functional requirements and worked with architect/design build contractor during construction of statewide traffic operations center. Coordinated requirements with various vendors (console manufacturer, video display vendor and audio/visual engineers) during design/integration phase of construction.	Dave Kinnecom Dir. Traffic Mgmt Div. 801-887-3707 dkinnecom@utah.gov	1 year related scope, as this was part of larger multi-year contract

Activu			
Project Name & Location	**Solution Provided**	**Project Owner's Contact Information**	**Length of Contract**
1) Glendale Regional Public Safety & Training Center (Glendale, AZ)	Activu Display Wall System including a 2x6 array of 67" DLP cubes, LCD display, Audio	Mitchell Lach Glendale EOC Manager (623) 872-5002 mlach@glendaleax.com	1.5 years
2) Arizona Department of Public Safety Counter Terrorism Information Center	Activu Display Wall System comprising of a 2x6 display wall of 50" cubes and a 2x3 display wall of 50" cubes in the main room, a 60" DLP cube with Activu in executive conference room, projector with Activu in the large conference room	Greg Hayes, IT Manager (602) 223-2852, ghayes@azdps.gov	3.5 years
3) Hudson Valley Department of Transportation (Hawthorne, NY)	Activu Display Wall System including a 6x6 wall of 50" DLP cubes plus a 1x2 of 67" DLP cubes, Audio	Giselle Vagnini Assistant Traffic Analyst (914) 742-6016 gvagnini@dot.state.ny.us	3.5 years

FINANCIAL STABILITY/WARRANTY

1. *Please provide an audited financial statement for 2006 (or most recent fiscal year).*

   TransCore is a subsidiary of Roper Industries, Inc. As a publicly held company, Roper Industries, Inc. provides ready access to their financial statements through the following link, which includes the most recent Annual Report, Quarterly Reports and SEC filings. Once accessed, please note the link to the left of the screen entitled "Financial Reports" for recent quarterly and annual results.

   http://phx.corporate-ir.net/phoenix.zhtml?c=99690&p=irol-sec

   Please note that TransCore is providing this link in lieu of paper copies in an effort to be mindful of the environment and conservation efforts. Should paper copies still be required, please contact Ms. Christine Faschini at ckfaschini@transcore.com for fulfillment.

2. *Explain your company's return policy.*

   TransCore works with vendor partners to obtain replacement parts or repair defective ones, and supply a manufacturer RMA (Return Merchandise Authorization). Shipping of the defective part to vendors such as Activu or the manufacturer's repair facility is the customer's responsibility. Return shipping costs are covered under the support program.

3. *What warranty is included on the system that you are offering from the various product manufacturers? Include all major hardware and software systems, including DLP cubes, display wall processors, software, all incidental materials and workmanship.*

TransCore warrants that, as of the date of the written Field Operational Test (FOT) and for a period of 5 years thereafter ("Warranty Period"), the System as an integrated and implemented design will perform in accordance with the system specification. During this Warranty Period, TransCore will either repair or replace any defective components and rectify any integration issues without additional cost to the City, including any required on-site visits by Activu Corp.

Item	Warranty
KVM (16 Port)	5 year parts and labor
Workstation	5 years parts & labor, next business day
Video Display	5 years parts & labor
Display wall processor	5 years parts & labor
Sound system	5 year parts and labor
46" LCD display	5 years parts & labor
Console furniture	5 years defects in materials and workmanship
DVD & DVR	5 year parts and labor
Software	5 year parts and labor
Incidental materials and workmanship	5 year parts and labor

4. *What warranty does your company offer over and above the manufacturers' warranties?*

Included within this bid is Activu's Platinum service which covers parts, labor and 2 preventative maintenance trips per year to inspect the video system components. Included within this service is 24/7 phone support. Warrantee costs can be reduced proportionally with a reduction in the relaxation of the warrantee requirements.

Warranty	Platinum Service
Unlimited Phone Support (9:00 AM - 6:00 PM ET)	X
Activu Services Online Support	X
Software Upgrades	X
Logistical Support	X
5 Year Hardware Warranty	X
Scheduled Color Balancing	X
Travel Expenses Included	X
Scheduled On-site Support	X
Emergency On-site Support	X
Yearly Re-lamping (parts included)	X
Extended Lamp Warranty	X
Extended Hardware Warranty	X
Unlimited 24/7 Phone Support	X

Glossary of Terms for Support Programs

Activu Online Support – Allows a customer to report problems or post questions online, as well as track the status of an open case. The online support system automatically alerts the Customer Support Manager of posted issues in order to ensure a timely, accurate response. It also gives the customer access to a knowledge database listing previously posted issues and their resolutions.

Software Upgrades – Customer will receive free access to downloadable Activu maintenance releases and full version upgrades. Customers with Gold and Platinum programs may elect to have an Activu technician provide on-site support visit to install the upgrade at no extra charge.

Logistical Support – For warranty repair on equipment, Activu works with vendor partners to obtain replacement parts or repair defective ones, and supply a manufacturer RMA. Shipping of the defective part to Activu or the manufacturer's repair facility is the customer's responsibility. Return shipping costs are covered under the support program.

5 Year Hardware Warranty – All hardware (unless otherwise noted) is covered by the original manufacturer warranty for five years from date of installation.

Scheduled Color Balancing – One (1) color balance procedure will be performed by a Systems Engineer approximately 6-8 months after the system is installed and operational. Additional color balancing will be treated as on-site support visits.

Travel Expenses Included – Customer will not be charged for travel expenses for on-site support.

Scheduled On-site support – Provides a fixed number of visits for each contract based on individual system requirements. These visits are for basic maintenance of the system and are planned at least two (2) weeks in advance.

Emergency On-site Support – TransCore will provide initial tier 1 and 2 support using staff from our Scottsdale office, and will coordinate with our vendors to provide emergency and other maintenance support activities that require their assistance.

Yearly Re-lamping– Activu will perform a complete lamp change, color balance and cube alignment. Costs of lamp parts, labor and travel are included.

Unlimited 24/7 Phone Support – Phone support will be provided 24 hours a day / 7 days a week via a dedicated toll-free support number.

CONTRACT EXECUTION

1. *What percentage of this project will your company directly complete?* 51 %
2. *What percentage of this project will your company sub-contract to others?* 49 %
3. *List sub-contractors, if applicable and provide a brief detail of their relevant experience as it relates to this project:*

Activu Corporation

Activu will provide all labor, hardware, software, integration, testing, and training that is required to meet the RFP requirements for the audio and information display systems, RFP item #4. Activu is a certified distributor of Mitsubishi video cubes.

4. *Will your sub-contractors meet the City's insurance requirements?*

   Yes X

5. *Based on the products offered, what are the service and support capabilities of your company? Will you be providing these services and support activities directly or will you be using third party vendors?*

   - TransCore will provide front line response support and coordination for all items, and will service and support all items not addressed by Activu or Dell.
   - Activu will provide the service and support for the video display wall and software.
   - Dell will provide service and support for the workstation and server hardware.

6. *List your project team and elaborate on your strategy to complete this project.*

   Our project team consists of TransCore as the Prime, with Activu as our exclusive video system provider. We feel this is a well versed and experienced team that will provide the City with the full range of ITS services it needs to ensure that this transfer of complex equipment and software from the existing traffic operations center, as well as the installation of a new video system and furnishings is conducted with minimal disruption. Our team consists of professional engineers and technicians from TransCore's Scottsdale, Arizona office, with augmentation from our partners at Activu, who will lead the video wall system installation. Highlights of experience that are pertinent to the requirements of this RFP are listed below:

   - Comprehensive familiarity with the City of Tempe Traffic Control System – TransCore designed, installed, and integrated the City's existing signal system.
   - Thorough understanding of ITS – our team has experience in TMC design, construction, maintenance and operation so we truly understand and appreciate the critical nature of the system and the need to minimize downtime during the cutover.
   - Wide ranging traffic operations knowledge – TransCore has designed and constructed ITS systems throughout the valley, so our familiarity of the regional goals and objectives, as well as the technical requirements to perform this work is well known to the proposed project team members. This knowledge is reflected in our selection of the proposed hardware and software as it will allow for long-term reliability, simple options for expansion, and ease of integration with neighboring agencies to share video.

7. *List your service team and elaborate on your strategy to maintain this installation.*

   TransCore has been providing TMC and ITS infrastructure support to MCDOT via an on-call contract which has covered areas such as integrating new equipment into the TMC, migrating between technologies, preparation of network planning, design and configuration documents, assisting agency staff with the operation and troubleshooting of TMC equipment and software applications, and technical support via suggestions pertaining to network improvements.

   Activu will provide the support requirements for the video display wall components and TransCore will provide technical support for all items not covered by Activu. The Activu support team offers a full range of programs for on-site and remote support of all hardware and software, including 24/7 telephone response and routine color balancing of the projectors.

   Activu staff can conduct training either at City of Tempe facilities or off-site at their state-of-the-art demonstration and training facility.

COMPLIANCE TO TERMS AND CONDITIONS

1. *Does your company agree to all terms, conditions, and scope of work of this RFP?*

   Yes X

2. *If selected, will your company follow all invoicing/billing requirements?*

   Yes X

3. *If selected, will your company allow other government agencies to utilize this Contract?*

   Yes X

4. *If selected, will your company comply with the Insurance requirements as outlined in the Special Terms and Conditions section of this RFP?*

   No* X, ** Reference Paragraph 3 – "All Coverages" on page 15. TransCore will endeavor to provide such notice of cancellation but cannot provide the requested endorsements.

5. *If so, provide name of the firm and "Best" rating.*

   - General Liability, Auto Liability, Excess (umbrella) Liability and some Workers' Compensation policies (CA and most other states) = National Union Fire Insurance Co. of Pittsburgh.
   - Some Workers' Compensation policies (FL, OR, MI, TX) = Illinois National Insurance Co.
   - Professional Liability = American International Specialty Lines Insurance Co.

   All are subsidiaries of AIG, and as such have an A+ rating.

Company Name: TransCore ITS

PRICE SHEET

ITEM NO.	DESCRIPTION OF REQUIRED MATERIAL, SERVICE OR CONSTRUCTION	QTY	UNIT	UNIT	EXTENDED PRICE
1.	KVM (16 port) Pricing to include supply, set-up and complete installation per specifications	1	Each	$ 10,000.00	$ 10,000.00
2.	Workstation Pricing to include supply, set-up and installation per specifications	3	Each	$ 7,400.00	$ 22,200.00
3.	System Integration Lump sum price to include all labor, equipment and materials For the work, complete in place per the specifications	1	Each	$ 16,500.00	$ 16,500.00
4.	Information Display System Lump sum price shall include all labor, equipment, materials for the work, and system warranty per the specifications	1	Each	$620,000.00	$620,000.00
5.	Control Room Console Hourly price to include all labor and materials per specifications	1	Each	$51,400.00	$ 51,400.00
6.	Equipment Rack – Enclosed Pricing to include supply and installation in place per specifications	6	Each	$ 4,400.00	$ 26,400.00
				Subtotal:	$746,500.00
				Tax:	$ 13,582.00
				Grand Total:	$ 760,082.00

*Applicable Tax 8.1%

Note: TransCore will accept City Procurement Card payment.

*** State correct jurisdiction to receive sales tax on the Vendor's Bid Offer, form CS-P201 (B) included in this Invitation for Bid document.**

Less prompt payments discount terms of 0 % 0 days/or Net 30 days. (To apply after receipt and acceptance of an itemized monthly statement.) For bid evaluation purposes, the City cannot utilize pricing discounts based upon payments being made in less than 30 days from receipt of statement.

Addendum to Solicitation

Tempe

City Procurement Office/City of Tempe • PO Box 5002 • 20 East 6th Street • Tempe, AZ 85280 • (480) 350-8324 • www.tempe.gov/purchasing

This addendum will modify and/or clarify:

Solicitation No.: 08-112

and is

Addendum No. 1

Procurement Description: Information Display System and System Integration

Changes should be made as follows:

Change: Page 1, Proposal Due Date/Time from Thursday, May 15, 2008, 3:00 P.M. Local Time *to* **Tuesday, May 27, 2008, 3:00 P.M. Local Time.**

Change: Page 1, Pre-Proposal Conference from Thursday, May 1, 2008, 10:30 A.M. *to* **Tuesday, May 13, 2008, 1:00 P.M. Local Time** (Financial Services Conference Room, 20 E. 6th Street, 2nd Floor, Tempe, AZ 85281)

Change: Page 1, Deadline for Inquiries from Monday, May 5, 2008, 5:00 P.M. Local Time *to* **Monday, May 19, 2008, 5:00 P.M. Local Time.**

Change: Page 20, Fifth Paragraph "Pre-Proposal Conference and Site Inspection", first sentence to read "Offerors are advised that a pre-proposal conference and site inspection will be held on *Tuesday, May 13, 2008 at 1:00 P.M.* in the Financial Services Conference Room, 20 E. Sixth Street, Second Floor, Tempe, AZ 85281.

The balance of the specifications and bid solicitation instructions to remain the same. Bidders/Proposal Offerors are to acknowledge receipt and acceptance of this addendum by returning of signed addendum with bid/proposal response. Failure to sign and return an addendum prior to bid/proposal opening time and date may make the bid/proposal response non-responsive to that portion of the solicitation as materially affected by the respective addendum.

Trans Core
NAME OF COMPANY

Dave Chambers, Sr. Associate
BY NAME (please print) TITLE

15300 N. 90th St. Ste 100
ADDRESS (or PO Box)

(480) 551-4600
TELEPHONE

Scottsdale, AZ 85260
CITY STATE ZIP

AUTHORIZED SIGNATURE

Addendum to Solicitation

Tempe

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This addendum will modify and/or clarify: Solicitation No.: 08-112

and is Addendum No.: 2

Procurement Description: Information Display System and System Integration

Changes should be made as follows:

The following clarifications, questions and answers resulted from the Mandatory Pre-Proposal Conference on Tuesday, May 13, 2008 at 1:00 p.m.

Copies of the Pre-Proposal Conference Attendance List from the Pre-Proposal Conference cancelled from May 1, 2008 and the rescheduled Pre-Proposal Conference on May 13, 2008 is attached as Exhibit A. No information was shared during the Pre-Proposal Conference on May 1, 2008.

Plans of the room are available upon request.

Question: Will this be an all or nothing award?
Answer: Yes. The contract will be awarded as a single contract.

Question: Is there a list of existing material that does need to be moved?
Answer: The equipment consists of three or four racks. This will depend upon the scheduling of the move. If the City's move is scheduled prior to the Contractor's move, then the City may take care of relocating the racks. However, for bidding purposes, Proposers should include the move within their proposal. See page 23 of the RFP for the list of equipment to be moved.

Question: Are there any leased lines, T1s, DSL's or anything?
Answer: There are no leased lines, TIs or DSL's to be moved. The timing of the move is critical, the successful proposer will furnish the City their schedule and the City will coordinate the move of our communications equipment with our leased line service provider (Qwest). The City will coordinate the move so that the cut-over occurs one week ahead of the move date.

Question: Can you elaborate on paragraph 3 on page 20? "The Contractor shall be solely responsible for the fabrication, installation and integration effort once the design of the console is established?"
Answer: In researching many operator workstations and conference tables, the City didn't see what it was looking for. The City opted to have the Contractor assist us in determining how the operator workstation/conference table should be configured, produce the necessary drawings, and have the unit fabricated. It will need to accommodate three operators.

Change: Page 54, Price Sheet, #5 unit of measure from hour to each.

Question: You mentioned the traffic signal system has a number of T1 circuits, are they copper?
Answer: There are no T1s to be moved. The existing operation center has 100 copper pair that enter the building of which 50 pair are active. When we move to the new building we are going to combine the 50 paired into (two) T1s. Our leased line service provider (Qwest) will supply the equipment necessary to demutiplex the TIs back to the original 50 circuits.

Question: So for purposes of this RFP, we would expect the demultiplexed circuits to be provided?
Answer: Yes.

Question: Is there any fiber involved in the systems?
Answer: There is no fiber to be moved. There is fiber in the new building that will support the Light Rail operation. Your interface to our system will be the traffic signal system servers and a Cisco catalyst 4506 switch.

Question: Are we being asked to do any fiber work or provide any switches?
Answer: No. All of the media whether it's fiber or copper is already terminated in the building. The cut-over will be a coordinated effort between the City, the successful proposer and Qwest.

Question: Do you talk about moving cameras in here?
Answer: There are no cameras being moved. We have camera feeds coming from ADOT that are routed to our existing facility. The City will re-route these feeds to the new building. We currently use a camera control software called Camera Chameleon. The Light Rail project is providing the City a different camera control software called Nice (a GE product). Our desire is to have the Camera Chameleon software control all cameras in our system. If single camera control software is not possible, we will use both Camera Chameleon and the Nice camera control software packages on our workstations.

Question: Do you know what cameras and encoders are currently be supported by the Nice graphic user interface?
Answer: The Light Rail project is using Axis 240 series encoders and Pelco Spectra 4 cameras. Proposers need to check with GE to establish which cameras the Nice camera control software supports.

Question: Do we know if those are multi-casted.
Answer: I would guess that they are. All video is routed to a DVR and is viewed by accessing the video from the DVR.

Question: How many concurrent images would you like to view?
Answer: See page 34 of the specifications.

Question: Are there diagrams available showing locations of existing load centers, concepts, studies?
Answer: Yes. The Contractor will have to get as-builts from the City as they become available. We can supply selected plan sheets on a per request basis.

Question: Have load calculations been done?
Answer: Yes. We have estimated our total future load at 12KVA. The installed UPS is rated at 30 KVA.

Question: How many racks is the Contractor providing?
Answer: The Contractor is providing six racks.

The balance of the specifications and RFI instructions to remain the same. Proposal Offerors are to acknowledge receipt and acceptance of this addendum by returning signed addendum with proposal. Failure to sign and return an addendum prior to proposal opening time and date may make the proposal non-responsive to that portion of the RFP as materially affected by the respective addendum.

TransCore
NAME OF COMPANY

Dave Chambers Sr. Associate
BY NAME (please print) TITLE

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Addendum to Solicitation

Tempe

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This addendum will modify and/or clarify:	Solicitation No.:	08-112
and is	Addendum No.	3
	Procurement Description:	Information Display System and System Integration

Changes should be made as follows:

The Due Date/Time for this proposal remains on **Tuesday, May 27, 2008, 3:00 PM Local Time.**

Question: Is dual head graphics KVM capability required?
Answer: Yes

Question: Are the three main console workstation locations to be connected to the new KVM system?
Answer: Yes

Question: If the Workstation PC's are to be considered for KVM connectivity, would you allow the PC chassis to be rackmounted in the projection equipment room racks? This dramatically cuts down on noise, heat in the work space and USB can still be provided to the workstation location.
Answer: No

Question: Please list which pc's/servers (and their physical locations) and which users (and their physical locations) are to be connected to the KVM. This impacts KVM system performance and installation pricing.
Answer: The KVM will attach to PC's in the offices in the back of the TMC (3), in the console (3 may move to rack), and the servers in the racks.

Question: On page 24 of bid specs, "RGB Interface/extender", shall we provide enough interface for all the potential inputs utilized in the initial install or enough for all the total capacity required?
Answer: Initial install

Question: On page 24 of bid specs, "Cable TV" section, in that paragraph, a connectivity plan is mentioned. Please provide copy of this plan
Answer: This is for the connection to the DVR's and the LCD display unit.

Question: One page 34, Video Recorders Section, which "switch" are you referring to in the RFP?
Answer: This can be either a high resolution switch or direct processor connection.

Question: Regarding the video recorders, no video switch (for composite video) is specified. Unless an owner furnished switch exists, so that video can be recorded. What sources minimum are required to be recorded?
Answer: Existing switch (Javelin) (for the non streaming video).

Question: Are we required to send composite video from any stream to each workstation PC input via a PC graphic card?
Answer: Streaming video will be IP to the workstations (decoded with a windows browser).

Question: Is it the intent of the DVD's to be controlled from the workstation location, even with the DVD installed in the equipment room? If so, via the infrared control and IR repeaters or PC control?
Answer: IR repeaters

Question: On page 36 in the Display section at the bottom of the page, you indicate 16 full motion video and RGB windows. Does this mean a total of 32 full motion windows?
Answer: 16 total between the two types

Question: On page 36 in the display section at the bottom of the page, is it a requirement that the images be able to overlap, or are separate individual windows acceptable?
Answer: Windows are separate but they need to be able to go across the cube lines without degradation.

Question: Projector lamps have a shelf life and it is normally, not recommended to purchase all lamps at one time. Is it acceptable to budget the number of lamps as requested, and provide a base set backups, and then provide the remaining during the course of the warranty, while always keeping spares on hand?
Answer: This is acceptable

Question: How many hours a day/week will the videowall are operated in typical operation?
Answer: 5 days a week, 11 hours a day

Question: Is there an existing Chameleon hardware and software installed now?
Answer: Yes

The balance of the specifications and bid solicitation instructions to remain the same. Bidders/Proposal Offerors are to acknowledge receipt and acceptance of this addendum by returning of signed addendum with bid/proposal response. Failure to sign and return an addendum prior to bid/proposal opening time and date may make the bid/proposal response non-responsive to that portion of the solicitation as materially affected by the respective addendum.

Trans Core
NAME OF COMPANY

Dave Chambers Sr. Associate
BY NAME (please print) TITLE

15300 N. 90th St, Ste 100
ADDRESS (or PO Box)

480 1551-8600
TELEPHONE

Scottsdale, AZ 85260
CITY STATE ZIP

AUTHORIZED SIGNATURE

Addendum to Solicitation

Tempe

City Procurement Office/City of Tempe • PO Box 5002 • 20 East 6th Street • Tempe, AZ 85280 • (480) 350-8324 • www.tempe.gov/purchasing

This addendum will modify and/or clarify: Solicitation No.: | 08-112

and is Addendum No. | 4

Procurement Description: | Information Display System and System Integration

Changes should be made as follows:

Change: Proposal Due Date/Time from Tuesday, May 27, 2008, 3:00 P.M. Local Time to **Thursday, May 29, 2008, 3:00 P.M. Local Time.**

Question: In review of the Addendum #2 written minutes from our pre-proposal conference, a question we asked was not included. It pertained to Page 34, "Streaming Video". The Addendum only has part of the question "how many concurrent images would you like to view" and we also asked whether we were required to provide all the hardware decoders necessary to view 64 simultaneous mpeg channels in this base installation. i.e. not just have the ability to achieve that many in the future thru hardware and/or software upgrades.

If the City just wants the ability for future, how many initial channels would the City require to decode and view in the base installation?

Answer: Firms are required to provide 32 simultaneous mpeg channels in this base installation using a hardware or software solution.

No further questions will be accepted at this time.

The balance of the specifications and bid solicitation instructions to remain the same. Bidders/Proposal Offerors are to acknowledge receipt and acceptance of this addendum by returning of signed addendum with bid/proposal response. Failure to sign and return an addendum prior to bid/proposal opening time and date may make the bid/proposal response non-responsive to that portion of the solicitation as materially affected by the respective addendum.

TransCore
NAME OF COMPANY

Dave Chambers, Sr. Associate
BY NAME (please print) TITLE

15300 N. 90th St, Ste 100
ADDRESS (or PO Box)

(480) 551-4600
TELEPHONE

Scottsdale, AZ 85260
CITY STATE ZIP

AUTHORIZED SIGNATURE

MITSUBISHI ELECTRIC

MegaView Wall

May 27, 2008

To Whom It May Concern,

This letter is acknowledgement that Activu Corporation is a Mitsubishi Datawall System Integration Partner. Activu has the largest Mitsubishi DW installation base in the United States, and have proven their technical prowess when installing Mitsubishi Datawall cubes. Therefore, Mitsubishi considers Activu's technical installation and service team to have equal technical capabilities as Mitsubishi System Engineers.

In addition to having the largest Mitsubishi Datawall Cube install base, Activu Corp. is the only US based system integrator that has been certified to perform board level repairs on Mitsubishi projection engines.

Please accept this letter to indicate Activu's exceptional installation and service performance as a Mitsubishi Datawall System Integration Partner. If you have any questions please contact me at: mkrstulja@mdea.com.

Sincerely,

Matt Krstulja
National Sales Manager, DW

Arizona Registrar of Contractors

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Company Name: **TRANSCORE ITS OF DELAWARE L L C (FN)**

License Status: **CURRENT** **Status Date:**

Action:

Status Narrative:

Additional Information: (This information may not include all applicable suspensions.)
SEE MASTER FILE FOR ADD'L OFFICERS

Address: LIBERTY CENTRE BLDG 200
8158 ADAMS DRIVE
HUMMELSTOWN, PA 17036

Phone Number: 717-561-2400

Former Company Name:

Date of Name Change:

License Number: ROC217086

License Class: A- COMMERCIAL
GENERAL ENGINEERING

License Entity: LIMITED LIABILITY CO

License Issue Date: 2/15/2006 **Renewed Thru:** 2/28/2008

Qualifying Party Information: (Last name listed first)
TAYLOR MICHAEL JOHN **Position:** EMPLOYEE **Date Qualified:** 2/15/2006

Principal Information: (Last name listed first)
WORTHINGTON JOHN MAC DONALD , PRES
GRABIAS JOSEPH STANLEY , VP-SEC
LINER DAVID BRANT , VP-AST SEC
SONI PAUL JOSEPH , VP-TREAS
HOLLING MICHAEL FRANK , ASST VP

Complaint Information:

TRANSCORE

15300 North 90th Street, Suite 350
Scottsdale, Arizona 85260-2772
480 351-4600 480 661-5490 fax
www.transcore.com

July 10, 2008

Ms. Lisa Goodman, CPPB
Procurement Officer
20 East Sixth Street
Tempe, Arizona 85281

Re: Best and Final Offer for Information Display System and System Integration

Dear Ms. Goodman,

TransCore ITS appreciates the opportunity to present our Best and Final Offer (BAFO) for the above captioned project. Please feel free to contact Mr. John Grant at (801)886-9170 ext. 19 if you have any questions or comments about our BAFO.

Respectfully,

TransCore ITS, LLC

Dave Chambers, PE
Senior Associate

City of Tempe
P. O. Box 5002
20 East Sixth Street
Tempe, AZ 85280
480-350-8324
www.tempe.gov
Financial Services
Central Services

Tempe

July 3, 2008

Mr. John Grant
TransCore ITS, LLC
15300 N. 90th St., Suite 100
Scottsdale, AZ 85260

Subject: *Best and Final Offer to Request for Proposal (RFP) #08-112 for Information Display System and System Integration*

The City enjoyed meeting with you to discuss your firm's offer to the above referenced solicitation. In accordance with the City procurement rules, your firm is hereby invited to submit a Best and Final offer to RFP #08-112 for Information Display System and System Integration. This is your opportunity to ensure that the best possible offer has been submitted.

The Best and Final offer should include responses to the following areas:

1) Warranty – The warranty period requirement shall be lowered from five (5) years to three (3) years on all components. The DLP cubes and display wall processor shall have an additional two (2) year warranty extension period priced per year as separate line items.

2) Streaming Video Requirements – Streaming video requirements shall be reduced to sixteen (16) streaming video inputs on installation, expandable to sixty-four (64) streams without replacement of any equipment or software.

3) KVM Switch – The KVM switch may be connected on its' own CAT5 cabling system.

4) Workstation Requirements – The workstation requirements may be lowered to equal the Dell Optiplex computer series. All workstations shall be delivered with one (1) monitor. The Operator Workstation requirement shall be reduced to two (2) workstations on the command and control console. All KVM cabling and LAN connections shall be installed in the console for the addition of a future third workstation.

5) Video Card – The video card supplied for the workstations shall support dual monitor operations and be configured for signal monitor operation on installation.

6) Command and Control Console Design – Development of the command and control console design may be done on a time and materials basis to minimize risk to the Contractor. The City does not anticipate requiring more than two (2) formal meetings to finalize the design.

7) Qwest – Contractors will not be required to coordinate the Qwest relocation to the new building.

8) Software Solution – The City requests that the DLP cubes and the video wall processor or equivalent software solution be individually itemized on the revised price quote.

9) Spare Bulbs – The spare bulb requirement for the DLP cubes shall be reduced to four bulbs total.

10) Alternative Solutions – Offerors may propose alternative solutions in additions to these requirements.

Please feel free to add any additional information that will improve your initial offer. A revised Price Sheet is attached as Exhibit A. Best and Final offers shall be due in the Procurement Office on **Thursday, July 10, 2008** at 3:00 P.M. (local time). If you fail to respond to this request your immediate previous offer shall be considered under the final evaluation process. You may also completely withdraw your offer at this time.

If you have any questions regarding the above please feel free to contact me at 480-350-8533. Thank you for participating with us on this procurement and taking the time to present your firm. We look forward to reviewing your Best and Final offer.

Sincerely,

Lisa Goodman

Lisa Goodman, CPPB
Procurement Officer

C. Evaluation Committee

Company Name: TransCore ITS, LLC

Exhibit A
REVISED PRICE SHEET

ITEM NO.	DESCRIPTION OF REQUIRED MATERIAL, SERVICE OR CONSTRUCTION	QTY.	UNIT	UNIT PRICE	EXTENDED PRICE
1.	KVM (16 port) Pricing to include supply, set-up and complete installation per specifications	1	Each	$ 9,962.00	$ 9,962.00
2.	Workstation Pricing to include supply, set-up and installation per specifications	2	Each	$ 8764.00	$ 17,528.00
3.	System Integration Lump sum price to include all labor, equipment and materials for the work, complete in place per the specifications	1	Each	$16,442.00	$ 16,442.00
4.	Information Display System Lump sum price shall include all labor, equipment, materials for the work, and system warranty per the specifications	1	Each	$ 13,038.00	$ 13,038.00
a.	DLP Cubes Mitsubishi VS-67PHU (SXGA + rear access) Manufacturer/Part Number	8	Each	$ 20,013.00	$ 160,104.00
b.	Video Wall Processor NA Manufacturer/Part Number	1	Each	$ 0.00	$ 0.00
c.	Software Solution Activu Manufacturer/Part Number	1	Each	$ 211,547.00	$ 211,547.00
5.	Control Room Console Hourly price to include all labor and materials per specifications	1	Hour	$140.00	$ 140.00
6.	Equipment Rack – Enclosed Pricing to include supply and installation in place per specifications	1	Each	$ 26,036.00	$ 26,036.00
7.	Two (2) Year Warranty for DLP Cubes	2	Year	$21,102.00	$ 42,204.00
8.	Two (2) Year Warranty for Display Wall Processor	2	Year	$7,773.00	$ 15,546.00
				Subtotal:	$ 512,547.00
				Tax:	$ 20,145.00
				Grand Total:	**$ 532,692.00**

* Applicable Tax 8.1 %

*** State correct jurisdiction to receive sales tax on the Vendor's Bid Offer, form CS-P201 (B) included in this Invitation for Bid document.**

Less prompt payments discount terms of 0 % ___ days/ or Net 30 days. (To apply after receipt and acceptance of an itemized monthly statement.) For bid evaluation purposes, the City cannot utilize pricing discounts based upon payments being made in less than 30 days from receipt of statement.